This Page Is Inserted by IFW Operations and is not a part of the Official Record

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

IMAGES ARE BEST AVAILABLE COPY.

As rescanning documents will not correct images, please do not report the images to the Image Problem Mailbox.

What is claimed is:

5

10

15

20

- 1. A protecting device for a connector with one or more electrical wires, the protecting device comprising:
- a wire passage formed for wiring the electrical wires led out of the connector, the wire passage including:

a first passage part for wiring the electrical wires along a first wiring direction to lead the electrical wires to terminals in the connector;

a second passage part for wiring the electrical wires in a second wiring direction different from the first wiring direction of the first passage part; and

a third passage part for wiring the electrical wires in a third wiring direction different from the second wiring direction of the second passage part, the third passage part extending in a direction in which the electrical wires are led out of the connector; and

a wire-interference rib formed at a boundary between the second passage part and the third passage part to project in an opposite direction to the direction in which the electrical wires are led out of the connector.

- 2. The protecting device as claimed in Claim 1, wherein the third passage part is provided, on an inner surface thereof, with an uneven part.
- 25 3. The protecting device as claimed in Claim 1, wherein a bend angle between the first wiring direction of the first passage part and the second wiring direction of the second passage part and another bend angle between the second wiring direction of the second passage part and the third wiring direction of the third passage part are substantially right angles, respectively.

5

10

15

20

25

4. The protecting device as claimed in Claim 1, further comprising a base member, a cover member and a hinge part for connecting the base member to the cover member, wherein

the first passage part and the second passage part are formed in the base member, while the third passage part is formed in both of the base member and the cover member, and

the protecting device is capable of displacement between an opened state that an inside surface of the base member and an inside surface of the cover member are opened and an assembled state that a joint surface of the base member confronts a joint surface of the cover member by the hinge part.

5. The protecting device as claimed in Claim 4, wherein

the base member and the cover member are provided with locking mechanisms for locking up the base member and the cover member in the assembled state, and

the locking mechanisms are arranged in positions on the side of the joint surfaces far from the hinge part and also arranged in positions on the side of the joint surfaces close to the hinge part.

A connector assembly comprising:

a connector including:

a connector housing having one or more cavities formed therein;

one or more electrical wires;

one or more terminals connected to respective ends of the electrical wires and arranged in the cavities of the connector housing, respectively; and

one or more shield members each of which is interposed between each of the electrical wires and the inner surface of each of the cavities, and

a protecting device to be assembled to the connector, the protecting device including:

a wire passage formed for wiring the electrical wires led out of the connector, the wire passage including a first passage part for wiring the electrical wires along a first wiring direction to lead the electrical wires to terminals in the connector, a second passage part for wiring the electrical wires in a second wiring direction different from the first wiring direction of the first passage part, and a third passage part for wiring the electrical wires in a third wiring direction different from the second wiring direction of the second passage part, the third passage part extending in a direction in which the electrical wires are led out of the connector; and

a wire-interference rib formed at a boundary between the second passage part and the third passage part to project in an opposite direction to a direction in which the electrical wires are led out of the connector.

20

15

10

- 7. The connector assembly as claimed in Claim 6, wherein the connector further includes a corrugate tube arranged apart from the connector housing to allow the electrical wires to be inserted.
- 25 8. The connector assembly as claimed in Claim 7, wherein the third passage part of the protecting device is provided with an uneven part for engagement with the outer periphery of the corrugate tube.
 - 9. The connector assembly as claimed in Claim 6, wherein a bend angle

between the first wiring direction of the first passage part and the second wiring direction of the second passage part and another bend angle between the second wiring direction of the second passage part and the third wiring direction of the third passage part are substantially right angles, respectively.

5

10

20

- 10. The connector assembly as claimed in Claim 6, wherein the protecting device is formed by a base member, a cover member and a hinge part for connecting the base member to the cover member, and
- the protecting device is capable of displacement between an opened state that an inside surface of the base member and an inside surface of the cover member are opened and an assembled state that a joint surface of the base member confronts a joint face of the cover member by the hinge part.
- 11. The connector assembly as claimed in Claim 10, wherein
 the base member and the cover member are provided with locking mechanisms for locking up the base member and the cover member in the assembled state, and

the locking mechanisms are arranged in positions on the side of the joint surfaces far from the hinge part and also arranged in positions on the side of the joint surfaces close to the hinge part.